



**MAR 2023** 

# Security Assessment Khalifa Inu Token

March 3, 2023





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## **Assessment Summary**

This report has been prepared for Khalifa Inu Token on the Binance Smart Chain network. Analytix Audit provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders





## **Technical Findings Summary**

#### **Classification of Risk**

| Severity                 | Description  |
|--------------------------|--|
| Critical                 | Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.            |
| <ul><li>Major</li></ul>  | Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.                   |
| <ul><li>Medium</li></ul> | Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform  |
| Minor                    | Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.      |
| 1 Informational          | Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code. |

#### **Findings**

| Severity                        | Found | Pending | Resolved |
|---------------------------------|-------|---------|----------|
| Critical                        | 0     | 0       | 0        |
| Major                           | 0     | 0       | 0        |
| <ul><li>Medium</li></ul>        | 0     | 0       | 0        |
| Minor                           | 0     | 0       | 0        |
| <ul><li>Informational</li></ul> | 0     | 0       | 0        |
| Total                           | 0     | 0       | 0        |



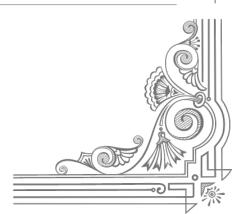


## **Project Overview**

## **Token Summary**

| Parameter     | Result  |
|---------------|---|
| Address       | 0x88331ef7698B26B5dc30f2CFC87a5a0d43BbAC46                                      |
| Name          | Khalifa Inu   |
| Token Tracker | Khalifa Inu (Khinu)   |
| Decimals      | 18  |
| Supply        | 1,000,000,000   |
| Platform      | Binance Smart Chain   |
| compiler      | v0.8.19+commit.7dd6d404   |
| Contract Name | Khalifalnu  |
| Optimization  | Yes with 200 runs   |
| LicenseType   | MIT   |
| Language      | Solidity  |
| Codebase      | https://bscscan.com/address/0x88331ef7698B26B5dc30f2CF<br>C87a5a0d43BbAC46#code |
| Payment Tx    | 0x002bb83e3196365170ae15b543c717464a9a713b7c9ece825<br>27790df5debdb50          |









## Risk Analysis Summary

| Parameter        | Result |
|------------------|--------|
| Buy Tax          | 3%     |
| Sale Tax         | 3%     |
| Is honeypot?     | Clean  |
| Can edit tax?    | No     |
| ls anti whale?   | No     |
| Is blacklisted?  | No     |
| Is whitelisted?  | No     |
| Holders          | 1      |
| Confidence Level | Medium |

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.







# Main Contract Assessed Contract Name

| Name        | Contract                                   | Live |  |
|-------------|--|------|--|
| Khalifa Inu | 0x88331ef7698B26B5dc30f2CFC87a5a0d43BbAC46 | Yes  |  |

# TestNet Contract Assessed Contract Name

| Name        | Contract                                   | Live |
|-------------|--|------|
| Khalifa Inu | 0xE41e3e27479096831ba83717fb275Ede07026CE8 | Yes  |

### **Solidity Code Provided**

| SollD       | File Sha-1                       | FileName        |
|-------------|----------------------------------|-----------------|
| Khalifa Inu | 2b78eacb45f6ca8707ccafeef360d95e | Khalifa Inu.sol |







## **Mint Check**

The project owners of Khalifa Inu do not have a mint function in the contract, owner cannot mint tokens after initial deploy.

The Project has a Total Supply of 1,000,000,000 and cannot mint any more than the Max Supply.

Mint Notes:

**Auditor Notes:** 

**Project Owner Notes:** 











## **Fees Check**

The project owners of Khalifa Inu do not have the ability to change fees, The contract currently has 3% buy and 3% sell taxes.

The team May have fees defined; however, they can't change those fees higher than 3% or may not be able to configure the same.

Tax Fee Notes:

Auditor Notes: The contract currently has 3% buy and 3% sell taxes, and cannot be changed

**Project Owner Notes:** 











## **Blacklist Check**

The project owners of Khalifa Inu do not have a blacklist function their contract.

The Project allow owners to transfer their tokens without any restrictions.

Token owner cannot blacklist the contract: Malicious or compromised owners can trap contracts relying on tokens with a blacklist.

**Blacklist Notes:** 

**Auditor Notes:** 

**Project Owner Notes: undefined** 









## MaxTx Check

The Project Owners of Khalifa Inu can't set max tx amount

The Team allows any investors to swap, transfer or sell.

MaxTX Notes:

**Auditor Notes:** 

**Project Owner Notes:** 

**Project Has No MaxTX** 









## **Pause Trade Check**

The Project Owners of Khalifa Inu don't have the ability to stop or pause trading.

The Team has done a great job to avoid stop trading, and investors has the ability to trade at any given time without any problems

**Pause Trade Notes:** 

**Auditor Notes:** 

**Project Owner Notes:** 

Owner can't pause trading









## **Contract Ownership**

The contract ownership of Khalifa Inu is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address

OxBae2b381072a9D61EA0cDB6AAF419a1cf7Cd4E73

which can be viewed:

#### **HERE**

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner's wallet is compromised, they could exploit these privileges.

We recommend the team renounce ownership at the right time, if possible, or gradually migrate to a timelock with governing functionalities regarding transparency and safety considerations.

We recommend the team use a Multisignature Wallet if the contract is not going to be renounced; this will give the team more control over the contract.









## **Liquidity Ownership**

The token does not have liquidity at the moment of the audit, block

If liquidity is unlocked, then the token developers can do what is infamously known as 'rugpull'. Once investors start buying token from the exchange, the liquidity pool will accumulate more and more coins of established value (e.g., ETH or BNB or Tether). This is because investors are basically sending these tokens of value to the exchange, to get the new token. Developers can withdraw this liquidity from the exchange, cash in all the value and run off with it. Liquidity is locked by renouncing the ownership of liquidity pool (LP) tokens for a fixed time period, by sending them to a time-lock smart contract. Without ownership of LP tokens, developers cannot get liquidity pool funds back. This provides confidence to the investors that the token developers will not run away with the liquidity money. It is now a standard practice that all token developers follow, and this is what really differentiates a scam coin from a real one.

#### Read More









## **KYC Information**

The Project Owners of Khalifa Inu is not KYC.

**KYC Information Notes:** 

Auditor Notes: No information found.

**Project Owner Notes:** 









# Smart Contract Vulnerability Checks

| ID      | Severity | Name  | File            | location  |
|---------|----------|---|-----------------|-----------|
| SWC-100 | Pass     | Function Default Visibility                       | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-101 | Pass     | Integer Overflow and Underflow.                   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-102 | Pass     | Outdated Compiler<br>Version file.                | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-103 | Pass     | A floating pragma is set.                         | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-104 | Pass     | Unchecked Call Return<br>Value.                   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-105 | Pass     | Unprotected Ether<br>Withdrawal.                  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-106 | Pass     | Unprotected SELFDESTRUCT Instruction              | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-107 | Pass     | Read of persistent state following external call. | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-108 | Pass     | State variable visibility is not set              | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-109 | Pass     | Uninitialized Storage<br>Pointer.                 | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-110 | Pass     | Assert Violation.                                 | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-111 | Pass     | Use of Deprecated Solidity Functions.             | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-112 | Pass     | Delegate Call to<br>Untrusted Callee.             | Khalifa Inu.sol | L: 0 C: 0 |
| 12      |          |   |                 |           |



| ANALYIIX | NIT      |  |                 |           |
|----------|----------|--|-----------------|-----------|
| AUI      | )        |  |                 |           |
| ID       | Severity | Name   | File            | location  |
| SWC-113  | Pass     | Multiple calls are executed in the same transaction.                               | Khalifa Inu.sol | L: 0 C    |
| SWC-114  | Pass     | Transaction Order<br>Dependence.   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-115  | Pass     | Authorization through tx.origin.   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-116  | Pass     | A control flow decision is made based on The block.timestamp environment variable. | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-117  | Pass     | Signature Malleability.  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-118  | Pass     | Incorrect Constructor<br>Name.   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-119  | Pass     | Shadowing State<br>Variables.  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-120  | Pass     | Potential use of block.number as source of randonmness.                            | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-121  | Pass     | Missing Protection against<br>Signature Replay Attacks.                            | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-122  | Pass     | Lack of Proper Signature<br>Verification.  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-123  | Pass     | Requirement Violation.   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-124  | Pass     | Write to Arbitrary Storage<br>Location.  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-125  | Pass     | Incorrect Inheritance<br>Order.  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-126  | Pass     | Insufficient Gas Griefing.   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-127  | Pass     | Arbitrary Jump with Function Type Variable.  | Khalifa Inu.sol | L: 0 0 0  |
| 133      |          |  |                 |           |



| ID      | Severity | Name   | File            | location  |
|---------|----------|--|-----------------|-----------|
| SWC-128 | Pass     | DoS With Block Gas<br>Limit.                                   | Khalifa Inu.sol | L: 0 C. 0 |
| SWC-129 | Pass     | Typographical Error.   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-130 | Pass     | Right-To-Left-Override control character (U+202E).             | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-131 | Pass     | Presence of unused variables.                                  | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-132 | Pass     | Unexpected Ether balance.                                      | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-133 | Pass     | Hash Collisions with<br>Multiple Variable Length<br>Arguments. | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-134 | Pass     | Message call with hardcoded gas amount.                        | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-135 | Pass     | Code With No Effects (Irrelevant/Dead Code).                   | Khalifa Inu.sol | L: 0 C: 0 |
| SWC-136 | Pass     | Unencrypted Private Data<br>On-Chain.                          | Khalifa Inu.sol | L: 0 C: 0 |
|         |          |  |                 |           |

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.







## **Inheritance**

The contract for Khalifa Inu has the following inheritance structure.

The Project has a Total Supply of 1,000,000,000









## **Social Media Checks**

| Social<br>Media | URL                             | Result |
|-----------------|---------------------------------|--------|
| Twitter         | https://twitter.com/Khalifa_Inu | Pass   |
| Other           |                                 | N/A    |
| Website         | https://khalifainu.io/          | Pass   |
| Telegram        | https://t.me/khalifa_inu        | Pass   |

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:** 

**Auditor Notes: undefined** 

**Project Owner Notes:** 









## **Assessment Results**

#### **Score Results**

| Review              | Score       |
|---------------------|-------------|
| Overall Score       | 91/100      |
| Auditor Score       | 100/100     |
| Review by Section   | Score       |
| Manual Scan Score   | 41/50       |
| SWC Scan Score      | 50/50       |
| Advance Check Score | undefined/0 |

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

#### **Audit Passed**

## **Audit Passed**

Current project reviewed successfully passed audit, meeting all requirements for approval per Analytix Audit guidelines.



@FreddyCryptos

Today's Date
Dubai - United Arab Emirates



#### **Assessment Results**

### **Important Notes:**

- No High-Risk Exploits/Vulnerabilities Were Found in the Source Code.
- Contract has been coded by Freddy (Analytix Audit)

# Auditor Score =100 Audit Passed





## **Appendix**



#### **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.

#### **Coding Best Practices**

BRC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.



#### **Disclaimer**

Analytix Audit has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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